Compact Mirror d Contact L ns Case

Background of the Invention

Field of the Invention

This invention relates generally to contact lens cases and more particularly to a novel contact lens case that is designed to have a compact configuration, while providing a reflective surface (e.g. mirror) in the construction of one or more of the contact lens cases' caps (or lids) in order to conveniently view the insertion or abstraction of the contact lens into or from the eye.

Description of the Prior Art

The use of contact lenses has become a popular addition, or alternative, to the use of eyeglasses. Because it is commonplace for those who have partially impaired vision to own and use both eyeglasses and contact lenses, users of contact lenses often carry in their possession the contact lens case in which to store the contact lenses in the event they want to make the change from wearing eyeglasses to wearing contact lenses, or visa versa, while going about their daily activities. In addition, those who use contact lenses often carry in their possession the contact lens case in order to correct any problems that may occur with their contact lenses while going about their daily activities. These problems may include the drying of the contact lenses, or a foreign object in their eye, such as a dirt particle or eyelash. Oftentimes, the contact lens can be removed from the eye and cleaned with water, or cleaned with the solution stored in the contact lens case by inserting the contact lens in one of the contact lens cases' storage reservoirs containing contact lens solution, then re-inserting the contact lens into the eye.

During the aforementioned situations, when a user of contact lenses has a need to insert or abstract the contact lens into or from the eye while going about their daily

activities, it is often convenient, and sometimes necessary, for that user to have at his or her disposal a reflective surface (e.g. mirror) to view the insertion or abstraction of the contact lens into or from the eye. Currently, an additional device with a reflective surface must be carried on the user's person when these situations occur, or, oftentimes, a reflective surface is not conveniently located or available at all when these situations occur.

In light of the foregoing, it can be appreciated that there is a need to have a reflective surface included in the construction of a compactly configurated contact lens case, more specifically the contact lens cases' cap (or lid). Several types of contact lens cases have been provided in the prior art. While these units may be suitable for the particular purpose to which they address, they would not be as suitable for the purposes of the present invention as heretofore described.

U.S. Pat. No. 4,429,786 to Hucal discloses an integrated contact lens and maintenance kit carrying apparatus for the portable facilitated storage and carrying of the user's contact lenses as well as a plurality of fluids normally utilized with such contact lenses. Two lens storage elements are operably connected with a plurality of fluid containers into an overall thin substantially cylindrical elongated configuration. The peripheral portions of the fluid containers and lens storage modules form the substantially cylindrical configuration of the apparatus periphery. The device includes indicia means associated the lens storage modules and the fluid containers for facilitated identification and selection of the fluids or lens eyes associated therewith.

U.S. Pat. No. 5,452,792 to Zautke discloses a contact lens case including a pair of container caps with timing mechanism for indicating when to perform a certain activity. These time-keeping container caps comprising a cover and flange, one of which is rotatable to reference calendar days, month names or other time-related indicia.

U.S. Pat. No. Des. 368,368 to Merrit discloses an ornamental design of a triple contact lens case.

U.S Pat. No. 6,382,409 B1 to Scala discloses a contact lens case for tracking as time of use for both a left and right contact lens. The case includes a base having a top side; a left side cup and right side cup positioned on the top side of the base each receiving a respective one of the left and right contact lenses; a left side timing mechanism for indicating a month and date related to use of the left contact lens; and a right side timing mechanism for indicating a month and date related to use of the right contact lens. The left and right side timing mechanisms may each include a digital display indicating a month and date related to use of the left and right contact lenses, respectively. Alternatively, the left and right timing mechanisms may each include a month and date wheel rotatably secure to the base for providing a month and date related to a respective contact lens. The rotatable month and date wheels of the left and right timing mechanisms each include a locking mechanism for preventing unwanted rotation of the wheels. The left and right side cups each include a side wall extending from the base to form a pool and cover for selectively restricting access to the pool formed by the side wall. The cover of the left and right side cups each include indicia indicating which contact lens is retained by the cup.

U.S. Pat. No. 6,435,339 B1 to Kroupa discloses a compact case for storing contact lenses that is designed to be attachable to a key ring and can be stored within the contact wearer's pocket without being obtrusive. The contact lens case includes two reservoirs that share a common circular bottom wall. The reservoirs are coaxially oriented and are threaded to accept cylindrical closure caps that seal the reservoirs. The cylindrical closure caps engage the opposite ends of the cylindrical body and have inner peripheral surfaces that are coaxially related to the outer peripheral surfaces of the two cylindrical reservoirs of the body. The contact lens case further comprises a tab that extends tangentially outward from the central axis of the reservoirs. The tab includes an aperture that is adapted to accept a removable clip that allows for the attachment of the contact lens case to a key ring.

Summary f the Invention

The present invention comprises a novel contact lens case that provides a compactly configured storage container for storing contact lenses and a reflective surface for conveniently viewing the insertion and abstraction of the contact lens into or from the eye. The contact lens case is design so that it can be inexpensively molded out of a polymer. The contact lens case includes two reservoirs that share a common circular bottom wall. The reservoirs are coaxially oriented and are threaded to accept cylindrical closer caps that seal the reservoirs from loss of fluid and the entry of contaminants. The cylindrical closure caps engage the opposite ends of the cylindrical body and have inner peripheral surfaces that are coaxially related to the outer peripheral surfaces of the two cylindrical reservoirs of the body. Furthermore, the top-end surface of one or more of the cylindrical closure caps has adhered to or embedded into said cylindrical closure cap a reflective surface, a mirror for example, allowing, as its primary function, the user to view the insertion or abstraction of the contact lens into or from the eye. The user will hold the cylindrical closure cap containing the reflective surface (e.g. mirror) directly in front of the eye with one hand while inserting or abstracting the contact lens into or from the same eye with the opposite hand. Thus allowing the user to view, at close proximity, the action heretofore described.

To the accomplishment of the above and related objects, this invention may be embodied in the form illustrated in the accompanying drawings, attention being called to the fact, however, that the drawings are illustrative only, and that changes may be made in the specific construction illustrated and described within the scope of the appended claims.

In accordance with the present invention, a contact lens case for storing contact lenses comprising: a base having a top side; at least one reservoir on the top side of said base and having an outer surface; a flange for said at least one said reservoir, said flange being attached to the outer surface of said reservoir and having its own outer surface; and a reflective surface covering for the outer surface of at least one said flange and having a reflective outer surface.

In a further embodiment, the invention is a contact lens case for viewing insertion or abstraction of contact lens into or from the eye comprising: a base having a top side; at least one reservoir on the top side of said base and having an outer surface; a flange having a basin for said at least one said reservoir said flange being removably attached to the outer surface of each said reservoir and having an outer surface; and a reflective surface attached to the outer surface of at least one said flange and having a reflective outer surface.

In still a further embodiment, the invention is a contact lens case for viewing insertion or abstraction of contact lens into or from the eye comprising: a base having a top side; at least one threaded reservoir on the top side of said base and having an outer surface; a flange for said at least one said reservoir said flange being removably attached to the outer surface of each said reservoir and having an outer surface; and a reflective surface adhered to the outer surface of said at least one said flange and having a reflective outer surface.

A Bri f D scription of th Drawings

Figure 1 is an exploded side view of the present invention showing the compactly configured contact lens case with a circular mirror positioned parallel to and directly above a basin included in the construction of one of the caps of said contact lens case.

Figure 2 is a sectional side view of the present invention showing the circular mirror within the basin that is included in the construction of a cap of the contact lens case.

Figure 3 is a side view of the present invention fully assembled.

Figure 4 is a perspective view of the present invention presented fully assembled and illustrating the mirror within the basin that is included in the construction of one of the caps of the contact lens case.

Figure 5 is a perspective view of the mirrored contact lens cases' cap with the mirror within the basin of said contact lens cases' cap.

A Detailed Description of the Invention

While the present invention will be described fully hereinafter with reference to the accompanying drawings, it is understood at the outset that the following description will, rather broadly, describe one embodiment of the invention in order that the present contribution to the art may be better appreciated. In this respect, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and to the arrangements of the components set forth in the following description or illustrated in the drawings. The invention is capable of other embodiments and of being practiced and carried out in various ways. Also, it is to be understood that the phraseology and terminology

employed herein are for the purpose of description and should not be regarded as limiting. As such, those skilled in the art will appreciate that the conception, upon which this disclosure is based, may readily be utilized as a basis for the designing of other structures, methods and systems for carrying out the several purposes of the present invention. It is important, therefore, that the claims be regarded as including such equivalent constructions insofar as they do not depart from the spirit and. scope of the present invention. Further, the purpose of the foregoing abstract is to enable the U.S. Patent and Trademark Office and the public generally, and especially the scientists, engineers and practitioners in the art who are not familiar with patent or legal terms or phraseology, to determine quickly from a cursory inspection the nature and essence of the technical disclosure of the application. The abstract is neither intended to define the invention of the application, which is measured by the claims, nor is it intended to be limiting as to the scope of the invention in any way.

In its broadest embodiment, the present invention comprises a novel contact lens case that provides a compactly configured storage container for storing contact lenses and a reflective surface for conveniently viewing the insertion and abstraction of the contact lens into or from the eye. The contact lens case is design so that it can be inexpensively molded out of a polymer or other similar materials. The contact lens case includes two reservoirs that share a common circular bottom wall. In one embodiment, the reservoirs are coaxially oriented and are configured to accept cylindrical closer caps that seal the reservoirs from loss of fluid and the entry of contaminants.

A most preferred embodiment of the invention is now described with reference to the Figures. The compactly configured contact lens case 10 is shown in Figure 1 in an exploded side view with a circular mirror 11 positioned parallel to and directly above a basin 12 included in the construction of the top surface of one of the caps 13 of said contact lens case 10. While shown as a circular mirror, it is to be understood that the mirror may have a number of geometric shapes and configurations.

The cap 13 is further constructed with a threaded inn r surface to engage the threaded outer surface 16 of the contact lens cases' base 15 to provide a seal. While shown as a threaded seal, other configurations fulfill the spirit of the invention. The opposite cap 14 similarly engages said base 15 while shown as a threaded surface, other connection or sealing mechanisms are envisioned by the invention.

Figure 2 is a sectional side view of the present invention showing the mirror 10 within the basin 12 that is included in the construction of the cap 13 of the contact lens cases' base 14.

A side view of the fully assembled present invention is shown in Figure 3. In this view, the mirror 10 is concealed within the basin of the cap 11 of the contact lens case. Figure 4 is a perspective view of the present invention presented fully assembled and illustrating the mirror 10 within the basin that is included in the construction of the cap 12 of the contact lens case. Figure 5 is a perspective view of a mirrored contact lens cases' cap 12 with the mirror 10 within the basin of said contact lens cases' cap 12.

In operation, the mirrored case enables the user to quickly and easily insert and adjust a contact lens. The present invention has been described with reference to the enclosed Figures. It is to be appreciated that the true nature and scope of the present invention is to be determined with reference to the claims appended hereto.